

where T_d is ^{an approximate} thickness of the inner graphite layer disposed on ^{each} inside ^{corner} corners of the cone portion, T_h is ^{an approximate} thickness of the inner graphite layer disposed on inside horizontal walls of the cone portion, and T_v is a thickness of the inner graphite layer disposed on inside vertical walls of the cone portion.

When the inner graphite layer satisfies the above conditions, it can uniformly transmit the high voltage to the accelerating electrode of the electron gun assembly and the panel.

The objectives and other advantages of the invention will be realized and attained by the structure particularly pointed out in the written description and claims as well as the appended drawings. It is also to be understood that both the foregoing general description and the following detailed description are not intended to limit the scope of this invention, many variations of which will be apparent to those with ordinary skill in the art. The disclosure of the specific embodiments are intended to provide further explanation of the invention as claimed.

BRIEF DESCRIPTION OF THE DRAWINGS

The accompanying drawings, which are included to provide a further understanding of the invention and are incorporated in and constitute a part of this specification, illustrate a particular embodiment of the invention and, together with the description, serve to explain the principles of the invention.

In the drawings:

Fig. 1 is a perspective view of a cathode ray tube according to a

preferred embodiment of the present invention;

Fig. 2 is a sectional view taken along line II-II of Fig. 1;

Fig. 3 is a schematic view of an electron gun assembly shown in Fig. 1,
and a path of electron beams of the electron gun toward a panel;

5 Fig. 4 is a sectional view taken along line IV-IV of Fig. 1.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Reference will now be made in detail to a preferred embodiment of the
present invention, an example of which is illustrated in the accompanying
drawings.

10 As shown in Figs. 1 and 2, a cathode ray tube according to a preferred
embodiment of the present invention includes a vacuum envelop 2 which is
formed with a substantially rectangular panel 4, a phosphor screen 6 being on
an inside surface of the rectangular panel 4; a small cylindrical neck 8 in which
an electron gun assembly 10 is arranged; and a funnel 12 formed between the
15 panel 4 and the neck 8. The funnel 12 includes a cone portion 12a formed
adjacent to the neck 8 and extending a predetermined distance in a direction
toward the panel 4.

20 a The phosphor screen 6 includes three phosphor layers, respectively,
comprising red, green, and blue phosphors, the phosphors being formed in
predetermined dot or ^{stripe-shaped} stripe-shape patterns. The phosphor layers are excited
and emit light by the striking of electron beams thereon. The electron beams
are generated by the electron gun assembly 10.